

Work Order ID 69821

Thursday, May 19, 2011 2:33:10 PM



Page 1

Item ID: D2230-1

Accept



Setup Start



Revision ID:

Item Name: Lug

Stop



Start Date: 5/19/2011 Start Qty: 100.00



Cust Item ID:

Required Date: 5/25/2011 Req'd Qty: 100.00



Customer:

Reference:

Approvals:

Process Plan:

H

Date:

11-05-19

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2230	Rev G

100

0.00



BAND SAW

Bandsaw

Memo

0.00

~~Jcaspa Bandsaw~~

~~Cut D2423 extrusion to 0.82"~~

~~Batch:~~

cut @ meter

CL 11/05/20

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

per purchasing
HAAS CNC vertical machine #1

1-Machine per folio FA927

DWG REV:

FOLIO REV:

(Check for crack while loading into the machine.)

2- deburr rough edges

P/O: 14141

issue P/O to meter

machine as per drawing D 2230 REV.G

CL 11/05/20 100

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 69821

Thursday, May 19, 2011 2:33:10 PM



Page 2

Item ID:	D2230-1	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Lug					
Start Date:	5/19/2011	Start Qty:	100.00	Cust Item ID:		
Required Date:	5/25/2011	Req'd Qty:	100.00	Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo rec'd + inspect for transit damage. attached c/c to W/O	0.00 0.00							<i>Rec'd 5/18/11 (100)</i>
130 QC Quality Control	QC2 Inspect parts - second check Memo	0.00 0.00							<i>Counts 29.00</i>
140 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00							<i>100 X 0 M/L 11/06/16</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 69821

Thursday, May 19, 2011 2:33:11 PM



Page 3

Item ID: D2230-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Lug

Start Date: 5/19/2011 Start Qty: 100.00



Cust Item ID:

Required Date: 5/25/2011 Req'd Qty: 100.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				100	0	11	u/06/17
160 Powdercoat Powder Coating N116964	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo START TIME: 9:00 OVEN TEMPERATURE: 320°F FINISH TIME: 9:30	0.00 0.00				100	0	11	06/17
170 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				100	0	11	06/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 69821

Thursday, May 19, 2011 2:33:11 PM

Page 4

Item ID: D2230-1

Accept

Revision ID:

Item Name: Lug

Start Date: 5/19/2011 Start Qty: 100.00

Required Date: 5/25/2011 Req'd Qty: 100.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

Identify as per dwg & Stock Location:

ST 476

0.00

Packaging

Memo

0.00

Packaging

190

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

5/24/06/20 100

11/6/21

mf 11-06-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, May 19, 2011 2:33:16 PM

Page 1

Work Order ID: 69821

Parent Item: D2230-1

Parent Item Name: Lug



Start Date: 5/19/2011

Required Date: 5/25/2011

Start Qty: 100.00

Required Qty: 100.00

Comments: IPP ☐ D ☐ 00.11.01 ☐ Added inspection level 8, and removed P/O for powder coat ☐ EC ☐

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2423		Manufactured	No			110	f	230.8900	0.0683	7.189474			



Lug Extrusion



CL 11/05/20

Location

Loc Qty

Loc Code

MAT006

230.89

43722

161.5

45800

1

63005

68.39

7.19

D 2230-1P

x100

Rec'd 5/19/11 (ov)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

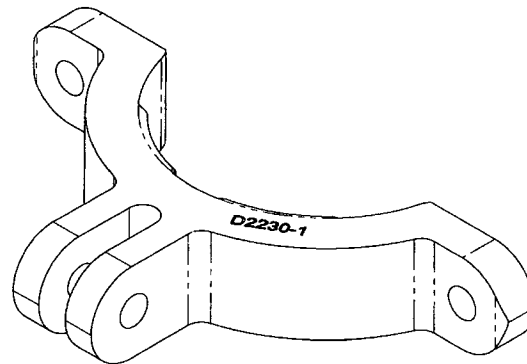
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

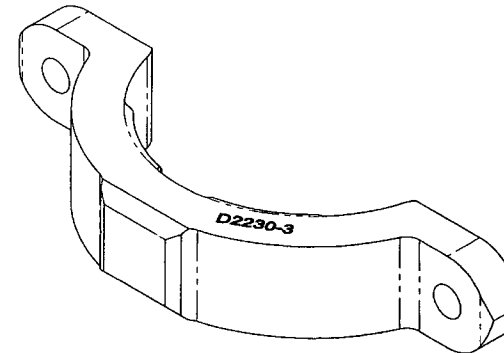
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 69821
PH 05-19



D2230-1 MOUNTING LUG



D2230-3 MOUNTING LUG

RELEASED
09/06/16

G

NOTES:

- 1) MATERIAL: MAKE FROM D2423 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO A DEPTH OF 0.010 ± 0.005 IN THIS LOCATION, WITH TOOL TIP RADIUS
 OF 0.015 ± 0.005.
- 7) WEIGHT: -1: 0.16 lbs
 -3: 0.14 lbs

G	REDRAWN IN SOLIDWORKS TO CURRENT DESIGN STANDARDS. REFER TO SECTION A-A & B-B FILLET ADDED TO PREVENT CHAFING OF RUBBER CUSHION ON INSTALLATION.	AJS	09.01.16
F	REDESIGN; R1.200 WAS 1.100	CP	99.12.13
E	RE-DESIGN	BW	95.01.04
D	RE-DESIGN	BW	95.01.04
C	RE-DESIGN	BW	94.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. G
MFG. APPR.	<i>[Signature]</i>	D2230	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	MOUNTING LUG	NTS
DATE	09.01.16	COPYRIGHT © 1994 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

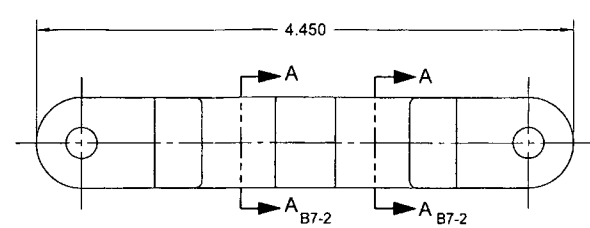
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

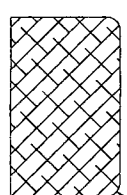
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

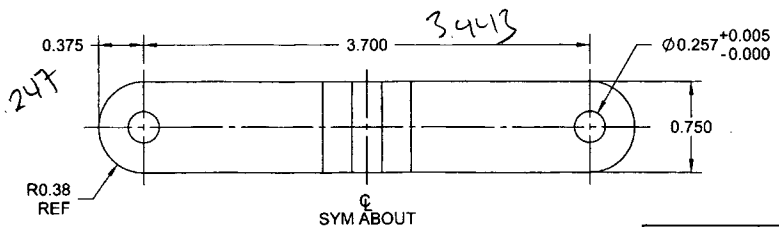
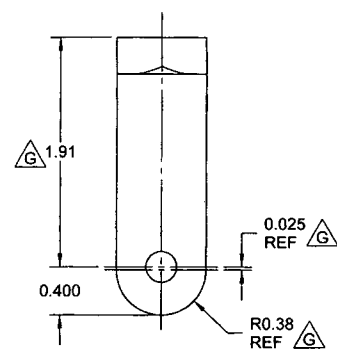
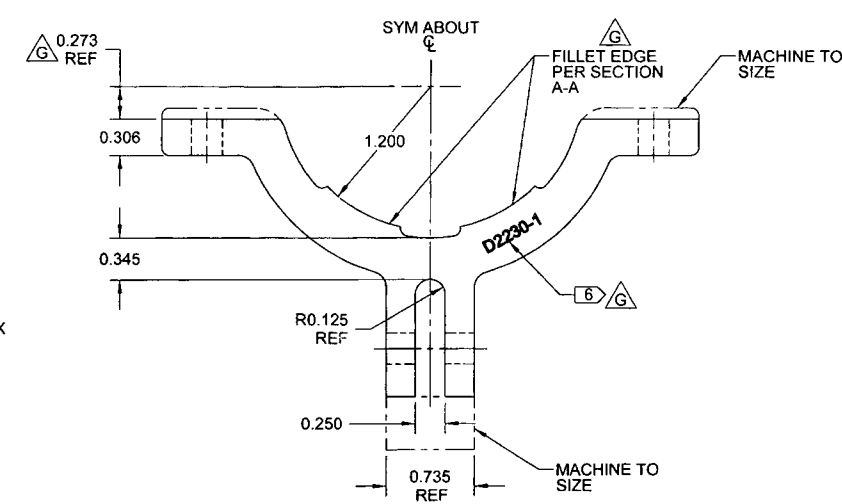


w/o case



R0.06 MIN - R0.10 MAX
2 PL

SECTION A-A D4:2
SCALE 2X



D2230-1 MOUNTING LUG

RELEASED
09/06/25/17

DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2230	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		MOUNTING LUG	NTS
DATE	09.01.16	<small>COPYRIGHT © 1994 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR CONVEYED OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1

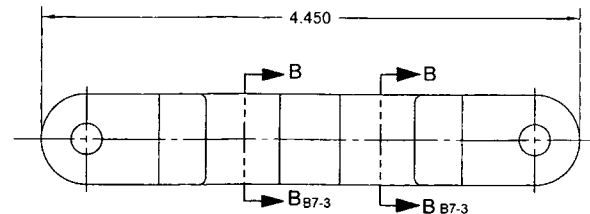
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

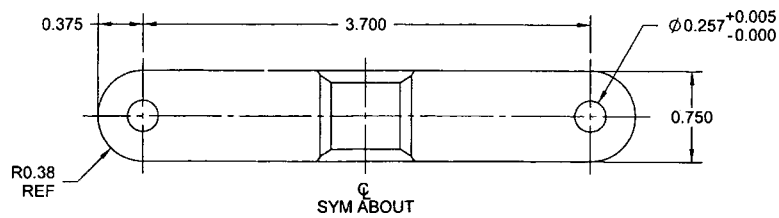
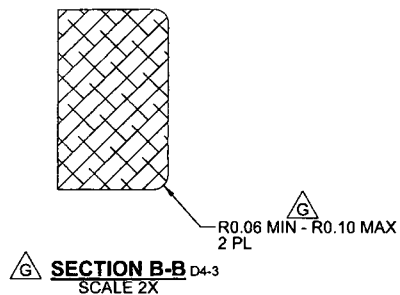
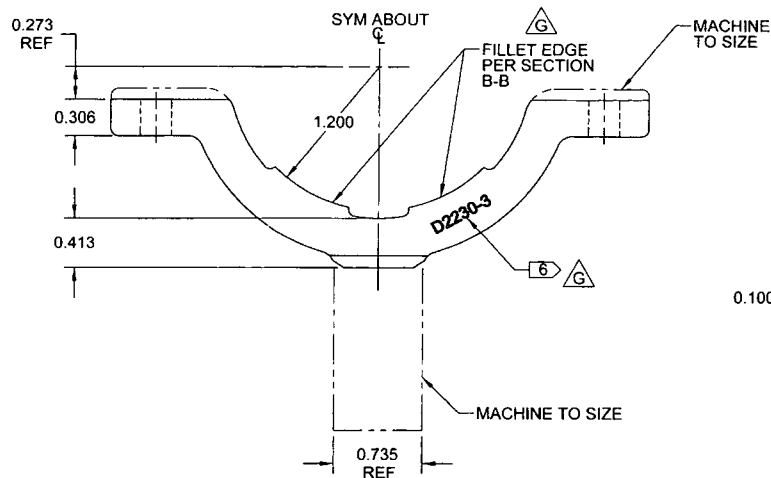
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/009821



D2230-3 MOUNTING LUG

RELEASED
09/06/23

DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2230	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		MOUNTING LUG	NTS
DATE	09.01.16	<small>COPYRIGHT © 1994 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO14141

Purchase Order Date 5/20/2011

PO Print Date 5/20/2011

Page Number 1 of 1

Order From :

VC-MET003

METEC METAL TECHNOLOGY INC.
20 TERRY FOX DRIVE PO BOX 781
VANKLEEK HILL, QC K0B 1R0
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	613 678 3957	Requisition Nbr	
Vendor Fax	613 678 3956	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID
5/20/2011

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3235-1P	lug	5/30/2011 Yes	100.00 Each	Yours ppd	\$13.9000	\$1,390.00
		Special Inst:	MACHINE A SPER DWG D3235 REV. A B69837				
2	D2230-1P	LUG	5/30/2011 Yes	✓ 100.00 Each	Yours ppd 10/4/15	\$18.9500	\$1,895.00
		Special Inst:	MACHINE AS PER DWG D2230 REV. G B69821				
3	D2230-3P	LUG	5/30/2011 Yes	100.00 Each	Yours ppd	\$13.6000	\$1,360.00
		Special Inst:	MACHINE AS PER DWG D2230 REV. G B69820				

PO Total: \$4,645.00

CERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 5/20/2011

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable



20 Terry Fox Drive
Vankleek Hill, Ontario K0B 1R0 , Canada
Tel: (613) 678-3957
Fax: (613) 678-3956

Delivery Slip No.: 18028
Date: Jun 14, 2011
Page: 1

Sold to: Dart Aerospace Ltd. Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7	Ship to: Dart Aerospace Ltd. Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7
Order No.: 14141	Sold By: Kueffer, Fabian
Shipped By: your truck	Ship Date:

Description	Unit	Ordered quantity	Shipped quantity	Backorder quantity
D3235-1 Mounting Lug Material supplied by DART: D2423 B63005	Each	100		100
D2230-1 Mounting Lug Material supplied by DART: D2423 B63005	Each	100	100	
D2230-3 Mounting Lug Material supplied by DART: D2423 B63005	Each	100		100
The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.				
Received by _____		Thank you for your order!		



CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

QUANTITY

PART NUMBER

PART NAME

P.O. NUMBER

100

D2230-1

Lug

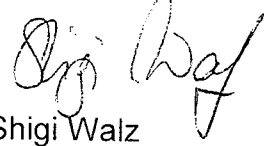
8 11/06/16

14141

MATERIAL: supplied by DART D2423 B63005

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.


Shigi Walz

Vankleek Hill, June 14, 2011